

IN THE CLAIMS

Please add new Claim 36 and amend Claim 1 as follows:

- 1. (Currently Amended) A method of making a ester comprising:
- (a) contacting an olefin or ether with carbon monoxide and an acid composition comprising BF₃·2ROH to form a product composition;
- (b) adding ROH to the product composition of (a); and
- (c) separating an acid product comprising BF₃·2ROH from the ester, wherein ROH is selected from methanol; n-propanol; n-butanol; 2-ethyl hexanol; isohexanol; isohexanol; isohexanol; isohexanol; isononanol; 3,5,5-trimethyl hexanol; isodecanol; isotridecanol; 1-octanol; 1-decanol; 1-dodecanol; 1-tetradecanol and mixtures thereof.
 - 2. (original) The method of claim 1 further comprising:
- (d) recycling a portion of the separated acid product to contact the olefin or ether.
- 3. (original) The method of claim 1 wherein the olefin is selected from the group consisting of ethylene, propylene, isoolefins, normal butenes, and C₅ to C₁₈ olefins.
 - 4. (original) The method of claim 2 wherein the olefin is isobutene.
- 5. (original) The method of claim 1 wherein the ether is represented by the general formula R'-O-R", wherein $R' = \text{saturated } C_1 C_{13}$ alkyl and $R'' = \text{saturated } C_1 C_{13}$ alkyl, and R' and R' can be the same or different.
- 6. (original) The method of claim 5 wherein the ether is methyl-t-butylether.

P.04

Docket No. 99B065-2

- 7. (original) The method of claim 1 wherein contacting the olefin or ether comprises contacting at a temperature from about 60°C to about 200°C.
- 8. (original) The method of claim 7 wherein contacting the olefin or ether comprises contacting at a temperature from about 110°C to about 160°C.
- 9. (original) The method of claim 1 wherein contacting the olefin or ether comprises contacting at a pressure from about 30 atm to about 200 atm.
- 10. (original) The method of claim 9 wherein contacting the olefin or ether comprises contacting at a pressure from about 110 atm to about 160 atm.
- 11. (original) The method of claim 1 wherein ROH is an alcohol selected from the group consisting of methanol, n-propanol, n-butanol, 2-propanol, 2-ethyl hexanol, isohexanol, isohexanol, isohexanol, isooctanol, isononanol, 3,5,5-trimethyl hexanol, isodecanol, isotridecanol, 1-octanol, 1-decanol, 1-dodecanol, and 1-tetradecanol.
 - 12. (original) The method of claim 1 wherein ROH is methanol.
- 13. (original) The method of claim 1 wherein the ether is methyl-t-butyl ether.
- 14. (original) The method of claim 1 wherein the ether is diisopropyl ether and ROH is 2-propanol.
 - 15. (original) The method of claim 1 further comprising:
- (d) contacting the olefin or ether with a hydrocarbon, wherein the hydrocarbon is selected from a saturated linear or branched hydrocarbon having at least six carbons.

P.05

- 16. (original) The method of claim 1 further comprising:
- (d) adding a hydrocarbon to the product composition of (a), wherein the hydrocarbon is selected from a saturated linear or branched hydrocarbon having at least six carbons.
 - 17. (original) The method of claim 16 further comprising:
- (e) separating the hydrocarbon and ROH from BF₃·2ROH and directing a portion of the separated hydrocarbon and the separated ROH to a unit selected from the group consisting of a separation unit, a reaction unit, and a combination thereof.
 - 18. (original) The method of claim 1 further comprising:
 - (d) contacting the olefin or ether with phosphoric acid.
- 19. (original) The method of claim 1 wherein separating the acid product comprises concentrating the acid product such that the molar ratio ROH:BF₃ in the concentrated acid product is from about 2:1 to about 4:1.
- 20. (original) The method of claim 19 wherein the concentrated acid product comprises a molar ratio of ROH:BF3 from about 2:1 to about 3:1.
- 21. (original) The method of claim 1 wherein the acid composition comprises a molar ratio of ROH:BF₃ from about 1.6:1 to about 3: 1.
- 22. (original) The method of claim 21 wherein the acid composition comprises a molar ratio of ROH:BF₃ from about 1.9:1 to about 3: 1.
- 23. (original) The method of claim 1 where the product composition contains less than 3% by weight carboxylic acid.

24. (original) A method of making methyl pivalate comprising:

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contacting methyl-t-butylether with carbon monoxide and an acid composition comprising BF₃·2CH₃OH to form a product composition comprising methyl pivalate;

adding methanol to the product composition; and separating an acid product comprising BF₃·2CH₃OH from the methyl pivalate.

- 25. (original) The method of claim 24 wherein contacting methyl-t-butylether comprises contacting at a temperature of about 110°C to about 160°C.
- 26. (original) The method of claim 24 wherein contacting methyl-t-butylether comprises contacting at a pressure from about 30 atm to about 200 atm.
- 27. (original) The method of claim 24 further comprising contacting the methyl-t-butylether with a hydrocarbon, wherein the hydrocarbon is selected from a saturated linear or branched hydrocarbon having at least six carbons.
- 28. (original) The method of claim 24 further comprising contacting the product composition with a hydrocarbon, wherein the hydrocarbon is selected from a saturated linear or branched hydrocarbon having at least six carbons.
- 29. (original) The method of claim 28 further comprising separating the hydrocarbon and the methanol from the methyl pivalate and directing a portion of the separated hydrocarbon and the separated methanol to a unit selected from the group consisting of a separation unit, a reaction unit, and a combination thereof.
- 30. (original) The method of claim 24 further comprising contacting the methyl-t-butylether with phosphoric acid.

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Docket No. 99B065-2

- 31. (original) The method of claim 24 wherein separating the acid product comprises concentrating the acid product such that the molar ratio ROH:BF₃ in the acid product is from about 2:1 to about 4:1.
- 32. (original) The method of claim 31 wherein the concentrated acid product comprises a molar ratio of ROH:BF₃ from about 2:1 to about 3:1.
- 33. (original) The method of claim 24 wherein the acid composition comprises a molar ratio of ROH:BF₃ from about 1.6:1 to about 3: 1.
- 34. (original) The method of claim 33 wherein the acid composition comprises a molar ratio of ROH:BF₃ from about 1.9:1 to about 3: 1.
- 35. (original) The method of claim 24 wherein the product composition contains nonanoic methyl esters such that the molar ratio of methyl pivalate to nonanoic methyl esters is about 4 or greater.

Please add new Claim 36.

- 36. (New) A method of making a ester comprising:
- (a) contacting an olefin or ether with carbon monoxide and an acid composition comprising BF₃ ROH to form a product composition;
- (b) adding ROH to the product composition of (a); and
- (c) separating an acid product comprising BF₃·ROH from the ester, wherein ROH is selected from methanol; n-propanol; n-butanol; 2-ethyl hexanol; isohexanol; isohexanol; isohexanol; isooctanol; isononanol; 3,5,5-trimethyl hexanol; isodecanol; isotridecanol; 1-octanol; 1-decanol; 1-dodecanol; 1-tetradecanol and mixtures thereof and wherein the molar equivalents of ROH in the BF₃ ROH, ranges from about 2 to about 4.